Gulf of Mexico Fishery Management Council
Generic Aquaculture Amendment
Frequently Asked Questions
December 2007

General Information

What is offshore aquaculture? (Section 5.1.1/5.1.2)

- Offshore aquaculture is the rearing of aquatic organisms in controlled environments (e.g., cages or net pens) in the federally managed areas of the ocean.
- Federally managed areas of the Gulf of Mexico begin where state jurisdiction ends (i.e., three nautical miles off Alabama, Mississippi, and Louisiana, and approximately 9 nautical miles off Florida and Texas) and extend 200 miles offshore.

Why conduct aquaculture offshore? (Section 5.1.3)

- Offshore aquaculture is desirable for two main reasons. First, there are fewer competing uses further from shore. Second, the deeper water and stronger water flows make it a desirable location for mitigating environmental impacts, such as nutrient loading.

Why is the Gulf of Mexico Fishery Management Council's (Gulf Council) developing an amendment to establish a permitting system for offshore aquaculture in the Gulf of Mexico? (Section 4.1)

- The current permitting process for offshore aquaculture is of limited duration and is not intended for the large-scale production of fish, making commercial aquaculture in federal waters impracticable at this time.
- Offshore aquaculture could help meet consumers' growing demand for seafood and reduce the nation's dependence on seafood imports.

Are there currently any offshore aquaculture operations in federal waters of the Gulf of Mexico? United States? (Section 2.2)

- Currently there are no commercial offshore aquaculture operations in federal waters of the Gulf of Mexico or United States.
- Several operations are conducting research and commercial production in state waters (< 3 miles from shore) off New Hampshire, Hawaii, and Puerto Rico.

What is the primary purpose of the Gulf Council's Generic Aquaculture Amendment? (Section 3.0)

- The purpose of the amendment is to maximize benefits to the Nation by establishing a regional permitting process to manage the development of an environmentally sound and economically sustainable aquaculture industry in federal waters of the Gulf of Mexico.
- The primary goal of the amendment is to increase yield of federal fisheries in the Gulf of Mexico by supplementing the harvest of wild caught species with cultured product.

Why is the Gulf Council proceeding so quickly to complete the Generic Aquaculture Amendment?

- The Gulf Council has been working on this amendment for almost five years.
- The Gulf Council first instructed staff to develop the Generic Aquaculture Amendment in January 2003.
- The Gulf Council held public hearings on the draft amendment in February 2004 and July 2007.
- The Gulf Council revised the draft amendment to address public input and scheduled additional public hearings on the revised draft in December 2007.

Why is the Gulf Council proceeding with an amendment when national legislation is proposed? (Appendix F/2.2)

- The Gulf Council began developing the Generic Aquaculture Amendment before national legislation was introduced.
- Even if national legislation were approved this year, it could take several years to develop implementing regulations.

Potential Environmental Impacts

Does the amendment consider potential environmental issues? (Section 6.1)

- Yes, the Gulf Council is preparing a Programmatic Environmental Impact Statement, which evaluates the potential environmental impacts of a range of alternatives.
- The Programmatic Environmental Impact Statement describes potential impacts to water quality, wild stocks, and fishing communities. Potential impacts resulting from offshore aquaculture may include increased nutrient loading, habitat degradation, fish escapement and competition with wild stocks, entanglement of endangered or threatened species, spread of disease, user conflicts, economic and social impacts on domestic fisheries, and navigational hazards.
- The preferred alternatives selected by the Gulf Council are intended to prevent or mitigate to the extent practicable these adverse environmental impacts.

Does the amendment include environmental monitoring requirements? Is the Gulf Council considering recordkeeping and reporting requirements? (Section 4.8)

- Yes, the Gulf Council's preferred alternatives would require aquaculture operations to submit to NOAA Fisheries Service a plan for conducting environmental monitoring. Required components of the plan would include: 1) monitoring interactions with threatened or endangered species, 2) describing how environmental impacts would be monitored, and 3) how the operation plans comply with Environmental Protection Agency standards.
- The preferred alternatives would provide numerous recordkeeping and reporting requirements to assist NOAA Fisheries Service in administering and reviewing aquaculture permits and evaluating environmental impacts.
- Preferred recordkeeping and reporting requirements include:
    - Submitting other state, Army Corps of Engineers, and Environmental Protection Agency permits and monitoring reports to NOAA Fisheries Service;
    - Reporting all fish landed and harvested from a facility;

- Reporting all incidents of any disease or parasites impacting greater than 10 percent of the cultured organisms;
- Notifying NOAA Fisheries Service of major escapement of cultured organisms or entanglements and interactions with marine mammals, endangered species, and migratory birds;
- Notifying NOAA Fisheries Service of any changes in sources used for providing fingerlings;
- Keeping copies of feed labels, harvest records, and sale records for three years;
- Informing NOAA Fisheries Service when the type of aquaculture system used for culture is changed;
- Obtaining approval for all new species to be cultured prior to introduction to the offshore grow-out facility; and,
- Submitting a standardized annual report to address recordkeeping and reporting activities.

Are there criteria for siting an offshore aquaculture operation? Do these criteria protect essential fish habitat? Traditional fishing grounds? (Section 4.6)

- Yes, the amendment proposes numerous criteria for protecting essential fish habitat, traditional fishing grounds, hard bottom, corals and coral reefs, habitat areas of particular concern, marine reserves, important spawning and nursery habitats for marine species, as well as siting criteria of other federal agencies.
- If the amendment is approved and implemented, NOAA Fisheries Service would review individual project proposals for compliance with these criteria prior to issuing an offshore aquaculture permit.

Does the amendment prohibit the use of antibiotics and other medicinal therapeutics for treating fish disease? (Section 6.12)

- The Gulf Council is not considering any alternatives that would prohibit treatments for disease because the use of drugs and chemicals by the U.S. aquaculture industry is strictly regulated by the U.S. Food and Drug Administration.
- The U.S. Food and Drug Administration evaluates a drug effectiveness and safety for humans and the environment before approving their use.

Permitting

What types of permits would the amendment require to conduct offshore aquaculture? (Section 4.1)

- The amendment would provide NOAA Fisheries Service authority to issue operational permits for offshore aquaculture operations.
- Other federal permits may be required from the U.S. Environmental Protection Agency (water quality, monitoring, pollution discharge), the Army Corps of Engineers (siting), the U.S. Food and Drug Administration (antibiotics and other therapeutics), Minerals Management Service (use of oil and gas platforms), and U.S. Coast Guard (navigation). **(Section 5.4.1)**

How long would the NOAA Fisheries Service' issued permit be effective? (Section 4.2)

- The Gulf Council's preferred alternative would authorize NOAA Fisheries Service permits to be effective for 10 years, with 5 year renewals thereafter. Other alternatives considered by the Gulf Council include issuing permits for 5 years, 20 years, or indefinitely.
- NOAA Fisheries Service would have the authority to revoke permits prior to their expiration date if permit conditions or recordkeeping and reporting requirements are not met.

What permit conditions are proposed? (Section 4.3)

- Permit conditions include:
    - Obtaining an assurance bond for the removal of aquaculture structures;
    - Providing NOAA Fisheries Service with plans for limiting genetic impacts on wild stocks, managing aquatic animal health, collecting and spawning broodstock and rearing fingerlings, conducting environmental monitoring, and preparing for emergencies and disasters;
    - Complying with requirements intended to improve law enforcement capabilities, such as landings notification requirements, submission of fin clips, possession of an operational permit onboard authorized aquaculture vessels, and maintenance of records pertaining to the number of organisms cultured;
    - Developing the proposed aquaculture operation within two years of receiving a permit; and,
    - Complying with other requirements intended to assist in the administration and enforcement of offshore aquaculture.

Allowable Species and Growing Systems

What species would be allowed for offshore aquaculture in the Gulf of Mexico? (Section 4.4)

- The Gulf Council's preferred alternative would allow all species managed by the Gulf Council, except shrimps and corals, to be cultured offshore. This would include reef fishes (e.g., snappers, groupers, jacks, etc), coastal migratory pelagics (e.g., mackerels, dolphin, and cobia), spiny lobster, stone crab, and red drum.
- The culture of live rock would continue to be regulated by existing management measures previously approved by the Gulf Council.
- The Gulf Council is also requesting NOAA Fisheries Service develop concurrent rulemaking to allow aquaculture of highly migratory species, such as tunas.

Would non-native, genetically modified species be allowed for offshore aquaculture? Endangered or threatened species? (Section 4.4)

- No, the Gulf Council's preferred alternative would allow only native, non-genetically modified species managed by the Gulf Council (except corals and shrimp) to be cultured in offshore aquaculture facilities in the Gulf of Mexico.
- The Endangered Species Act prohibits the take, import or export, possession, sale, delivery, or transport of all endangered species and most threatened species.

- None of the species managed by the Gulf Council are currently listed as endangered or threatened under the Endangered Species Act.

What types of growing system technology would be allowed for offshore aquaculture? Are these growing systems reliable? (Section 4.6)

- The Gulf Council's preferred management alternative does not specify the types of allowable growing systems. Instead, NOAA Fisheries Service would review growing system technology proposed by the permit applicant on a case-by-case basis to ensure reliable technology is used.
- The most common growing systems used for offshore aquaculture are cages and net pens.
- NOAA Fisheries Service would assess the reliability of each growing system to withstand major storm events and other natural disasters on a case-by-case basis.

Other Questions

Will the amendment prohibit the use of oil and gas platforms for offshore aquaculture? (Section 5.4.3)

- The amendment would not prohibit the use of oil and gas platforms for offshore aquaculture.
- The Minerals Management Service has authority to regulate the use of oil and gas platforms for offshore aquaculture and other purposes.
- The Energy Policy Act of 2005 provides the Secretary of the Interior authority to issue a lease, easement, or right-of-way on the Outer Continental Shelf for activities that use oil and gas facilities for other (non-energy related) authorized marine-related purposes, such as aquaculture.
- The MMS published a final Programmatic Environmental Impact Statement in November 2007 which assesses the impacts of allowing the use of energy facilities for non-energy related purposes. The MMS is expected to make a final decision on this action in December 2007.

Will the aquaculture amendment require compensation for allowing offshore aquaculture operations the exclusive use of public resources? (Section 5.4.3)

- No, the amendment would not require compensation from offshore aquaculture operations for use of a public resource.
- The Magnuson-Stevens Fishery Conservation and Management Act does not allow NOAA Fisheries Service to charge fees that exceed the administrative costs of issuing permits.
- Establishing a permitting process for offshore aquaculture operation in the Gulf of Mexico is expected to benefit the Nation by increasing food production and reducing the potential reliance on imports.